

**ANDHRA PRADESH SOLAR POWER CORPORATION PRIVATE LIMITED**  
**(A J V COMPANY OF GOVT OF ANDHRA PRADESH AND GOVT OF INDIA)**

## **KURNOOL ULTRA MEGA SOLAR PARK (1000 MW)**

**BIDDING DOCUMENT  
FOR THE WORK OF**

**Name of work:** **APSPCL – LAD –KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**

### **TWO PART BID**

### **TENDER SPECIFICATION**

**NOTICE INVITING TENDERS (NIT) NO.**  
**APSPCL-e-C- 06/2023-24/SE/Civil/APSPCL, Dt. 19.04.2023**

**ANDHRA PRADESH SOLAR POWER CORPORATION PRIVATE LIMITED  
KURNOOL ULTRA MEGA SOLAR PARK (1000 MW)**

**TENDER NOTICE**

**Tender Notice No. APSPCL-e-C- 06/2023-24/SE/Civil/APSPCL, Dt. 19.04.2023**

1.	Department Name	<b>Andhra Pradesh Solar Power Corporation Private Limited (A J V Company Of Govt. Of Andhra Pradesh And Govt. Of India)</b>
2.	Circle/Division Name	Superintending Engineer / Civil / APSPCL / Tadepalli
3.	Tender Notice No.	<b><u>APSPCL-e-C- 06/2023-24/SE/Civil/APSPCL, Dt. 19.04.2023</u></b>
4.	Name of Work	APSPCL – LAD –KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. AP.
5.	Estimated Contract Value (Approximately)	<b>Rs. 67,16,000 /- (Rupees Sixty Seven Lakh Sixteen Thousand Only)</b>
6.	Period of Contract	6 Months
7.	Form of Contract	L.S
8.	Tender Type	Open
9.	Tender Category	Works
10.	Transaction Fee Payable to MD/APTS payable at Vijayawada (including GST)	<b>Rs.2,378/- (Rupees Two Thousand Three Hundred and Seventy Eight Only)</b>
11.	Bid Security (EMD)	<b>Rs.68,000/- (Rupees Sixty Eight Thousand Only)</b>
12.	Bid Security Payable to	By way of online payment (or) BG drawn on any nationalized/Scheduled banks in favour of Managing Director/APSPCL/Tadepalli. The validity of B.G. should be for minimum period of 6 months.
13.	Process Fee	Not Applicable
14.	Schedule Available Date & Time	<b>19.04.2023, 5.00 P.M.</b>
15.	Schedule Closing Date & Time	<b>17.05.2023, 4.00 P.M.</b>
16.	Bid Submission closing Date & time	<b>17.05.2023, 5.00 P.M.</b>
17.	Bid Submission	<b><u>Online</u></b>
18.	Bid Validity	180 days from the date of opening of the Bid
19.	Pre Bid Meeting	Not Applicable
20.	Pre Qualification/ Technical Bid Opening Date (Qualification and Eligibility Stage)	<b>18.05.2023, 3.00 P.M.</b>
21.	Price Bid Opening Date & Time	<b>19.05.2023, 03.00 P.M.</b>
22.	Eligibility Criteria	<b><u>1. Registration</u></b>  (i) The bidder shall be registered as <b>Class-III or above</b> in any State/Central Govt. or any State/Central PSU etc., (ii) Registration under process shall not be accepted.

		<p><b><u>2. Experience</u></b></p> <p>(i) The bidder should have experience in execution of similar works as a prime contractor of value not less than <b>Rs.33.58 Lakh</b> in any one year during the last five completed financial years i.e., <b>2018-19 to 2022-23</b> in State/Central Govt./ State or Central PSU etc., The works under execution shall not be considered.</p> <p>(ii) The bidder should have executed the following minimum quantities in any one year during the last five completed financial years i.e., <b>2018-19 to 2022-23</b> in State/Central Govt./State or Central PSU etc.,</p> <p style="text-align: center;"><b>a) Earth Work Excavation / Embankment : 36500 Cum</b></p> <p>(iii) No other clauses and sub clauses/conditions of G.O. Ms.No. 94, Dt.01.07.2003 is applicable for calculating eligibility criteria other than the prescribed in eligibility criteria.</p>
		<p><b>3. Solvency:</b> <b>Liquid asset/credit facilities/Solvency certificate</b> (not older than 12 months from the date of availability of tender specification on e-procurement platform) issued by any Indian Nationalized Bank or scheduled bank of value not less than <b>Rs. 33.58 Lakh</b></p> <p><b>4. Turnover:</b> The bidder should have the turnover of value not less than <b>Rs.2.01 Cr</b> during the last three financial years i.e., <b>2020-21 to 2022-23</b> put together.</p> <p><b>5. Key Personnel:</b> The bidder have to furnish the qualification certificates of the key personal (Graduate Engineer/Civil – 1 No, Diploma Engineer/Civil – 1 No).</p> <p><b>6. Critical Equipment:</b> The bidder have to furnish the Declaration of critical equipment a per the list furnished in the "detailed tender notice" on non-judicial stamp paper of Rs 100/-</p> <p><b>7. General</b> <b><u>Responsibility for correctness of the information submitted in the online bid lies with bidder. If any information furnished in the bid is proved to be false at a later date, the bid will not only be rejected but the bidder will be BLACKLISTED.</u></b></p>
23.	Place of Opening of Tenders	In the chambers of Superintending Engineer/Civil/ APSPCL, Flat no: 501, 5th Floor, Garuda Enclave, beside TG Plaza, Tadepalli, Guntur-522501.
24.	Officer Inviting Bids	Superintending Engineer/Civil/APSPCL/Tadepalli.
25.	Address & Contact Details	Superintending Engineer/Civil/ APSPCL, Flat no: 501, 5th Floor, Garuda Enclave, beside TG Plaza, Tadepalli, Guntur-522501. Phone: +91-9848113328, +91-9440567940. E-Mail: <a href="mailto:apspcl.secivil@gmail.com">apspcl.secivil@gmail.com</a>

26.	Procedure for bid submission	<p>a) The tender should be in the prescribed forms which can be obtained from 'e' procurement platform from the date of electronic publication up to the time and date indicated in the tender notice. The intending bidders shall enroll themselves on the 'e' procurement market-place <a href="http://www.apecprocurement.gov.in">www.apecprocurement.gov.in</a> Those contractors who register themselves in the 'e' procurement market place can download the tender schedules at free of cost. The bidders shall authenticate the bid with his digital certificate for submitting the bid electronically on 'e' procurement platform <b>and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-procurement platform</b> following the G.O.Ms.No.6, I.T&amp;C Department, dated. 28-02-05.</p>
		<p>b) Intending bidders can contact office of the Superintending Engineer/ Civil/APSPCL/Tadepalli/ Guntur -522501 for any clarification/information on any working day during working hours</p> <p>c) The bidders who are desirous of participating in e-procurement shall submit their bids etc., in the standard formats prescribed in the tender documents, displayed at "e" market place. The bidders should invariably upload the statement showing the list of documents etc., in the "e" market place in support of their Technical bids. The bidder should upload scanned copies of all relevant certificates.</p> <p>d) The Bidder shall authenticate the bid with his digital certificate for submitting the bid electronically on e-Procurement Platform and the bids not authenticated by Digital certificate of the bidder will not be accepted on the e-Procurement platform.</p> <p>e) The Department shall carry out the bid evaluation solely based on the uploaded documents, BG/online payment towards EMD in the e-procurement system.</p> <p>f) The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, BG towards EMD prior to issue of LOI.</p> <p>g) The successful bidder shall invariably furnish the original BG towards EMD, Certificates/documents of the uploaded scanned copies to the Tender Inviting Authority before stipulated time given to him either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The Department will not take any responsibility for any delay in receipt/non-receipt of original BG towards EMD, certificates/documents, from successful bidder before the stipulated time. On receipt of documents, the Department shall ensure the genuineness of all certificates documents uploaded by the bidder in e-procurement system in support of the qualification criteria before issue of LOI.</p> <p>h) If any successful bidder fails to submit the original hard copies of uploaded certificates/documents, BG towards EMD within the stipulated time or if any variation is noticed between the uploaded documents and the hard copies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-procurement platform for a period of 3 years.</p>

		The e-procurement system would deactivate the user ID of such defaulting successful bidder based on the trigger /recommendation by the Tender Inviting Authority in the system. Besides this, the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government.
27.	Statutory Requirements	<p>The tenderer shall fulfill the following statutory requirements.</p> <p><b>a) <u>Labour Rules and Regulations</u></b> The tenderer shall comply with all statutory labour rules and regulations for EPF, GIS/ESI, Labour cess, Contract labour rules, Workmen compensation etc., as may be applicable.</p> <p><b>b) <u>GST</u></b> The tenderer should have registration under GST in the state of Andhra Pradesh from concerned department. The rates are exclusive of GST. Applicable GST on date will be allowed on the work done price against submission of GST invoice.</p>
28.	Other Payments to be made	<p>Apart from the Bid Security (EMD) the tenderer shall be liable to pay the following amounts:</p> <p><b>a) <u>Transaction Fee:</u></b> The participating bidders have to pay transaction fee of 0.03% (subjected to a maximum of Rs. 10,000.00) on estimated contract value of work with GST @ 18% i.e., <b>Rs.2,378/- (Rupees Two Thousand Three Hundred and Seventy Eight Only)</b> in favour of MD/APTS payable at Vijayawada at the time of bid submission electronically.</p> <p><b>b) <u>Corpus Fund:</u></b> Successful bidder has to pay Corpus fund @ 0.04% (subjected to a maximum of Rs. 10,000.00 for works with ECV/QV up to Rs 50.00 Crores and Rs 25,000.00 for works with ECV/QV more than Rs 50.00 Crores) through Online payment in favour of Managing Director, APTS, Vijayawada towards corpus fund at the time of concluding agreement.</p>
29.	Documents to be submitted to the Tender inviting authority.	<p>All the bidders shall upload the scanned copies of the following documents on e-procurement system</p> <ol style="list-style-type: none"> <li>1) BG/Online payment for EMD amount - This will be the primary requirement to consider the bid responsive. - Mandatory.</li> <li>2) Contractor registration certificate – Mandatory.</li> <li>3) Experience certificates of works for value within the block period – Mandatory.</li> <li>4) Experience certificates in support of quantities executed with in the block period – Mandatory.</li> <li>5) Solvency certificate – Mandatory.</li> <li>6) Annual turnover certificate – Mandatory.</li> <li>7) Qualification certificate of key personnel – Mandatory.</li> <li>8) Declaration of critical equipment proposed to be deployed on non-judicial stamp paper of Rs 100/- Mandatory.</li> <li>9) GST Registration – Mandatory.</li> <li>10) IT Returns – Mandatory.</li> </ol>

		<p><b>Other optional documents:</b></p> <p>1. Registration copies of EPF, ESI/Insurance.</p> <p><b>Note:</b></p> <p>1) The tenderer is liable to be disqualified, if he is found to have mislead or furnished false information in the forms/ Statements/Certificates submitted in proof of qualification requirements and record of performance such as abandoning of work, not properly completing of earlier contracts, inordinate delay in completion of works, litigation history, financial failures and or participated in the previous tendering for the same work and has quoted unreasonable high price etc.</p> <p>2) Even while executing the work, if found that the contractor had produced false/fake certificates, he will be black listed and the contract will be terminated and his Bid security will be forfeited and work will be carried out through other agency at his cost and risk.</p>
30	Other relevant information	<p>1. APSPCL reserves the right to reject any or all the tenders without assigning any reasons thereof.</p> <p>2. APSPCL reserves the right to amend or modify the tender and its conditions before <b>12.05.2023, 4.00 P.M.</b> (The details will be updated in APSPCL web site)</p> <p>3. Any other condition regarding receipt of tenders in conventional method appearing in the tender documents may please be treated as not applicable.</p> <p>4. The contractors have to upload the information preferably in Zip format.</p> <p>5. The contractors should upload the documents duly signing each and every paper.</p> <p>For all clarifications &amp; guidance, the bidders may contact the Superintending Engineer/Civil/ APSPCL/Tadepalli/ Guntur – 522 501.</p>

**Sd/-**  
**SUPERINTENDING ENGINEER/CIVIL**

To

The Bidders through paper notification/web publication.

**Copy submitted to:**

The Managing Director & CEO/APSPCL for favour of perusal.

**Copy to:**

- 1) Notice Board.
- 2) The Chief Financial Officer/APSPCL/Tadepalli for information.
- 3) The Deputy Executive Engineer/Civil/APSPCL/N.P.Kunta for information.
- 4) The Deputy Executive Engineer/Elec/APSPCL/Kurnool for information.
- 5) The Deputy Executive Engineer/Civil/APSPCL/Kadapa for information.

## PRE-QUALIFICATION BID

Name of work: APSPCL – LAD –KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.

1. The work of "APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P." is to be executed under this contract and to complete strictly as per the programme given in the specification. No extension of time beyond contract period stipulated in the specification can be given under this contract except for reasons contributing to the delay for which the contractor is not responsible.

2. **Registration:**

The bidder shall be registered as **Class-III and above** in any State/Central Govt. or any State/Central PSU etc. Registration under process shall not be accepted.

3. **Technical Requirement:**

1. Work Experience:

(i) The bidder should have experience in execution of similar works as a prime contractor of value not less than **Rs.33.58 Lakh** in any one year during the last five completed financial years i.e., **2018-19 to 2022-23** in State/Central Govt./ State or Central PSU etc., The works under execution shall not be considered.

(ii) The bidder should have executed the following minimum quantities in any one year during the last five completed financial years i.e., **2018-19 to 2022-23** in State/Central Govt./State or Central PSU etc.,

**a) Earth Work Excavation / Embankment : 36500 Cum**

(iii) No other clauses and sub clauses/conditions of G.O. Ms.No. 94, Dt.01.07.2003 is applicable for calculating eligibility criteria other than the prescribed in eligibility criteria.

4. **Financial Requirement:**

**EMD:** The bidder shall pay EMD amount of **Rs.68,000/- (Rupees Sixty Eight Thousand Only)** By way of online payment (or) BG drawn on any nationalized/Scheduled banks in favour of Managing Director/APSPCL/Tadepalli. The validity of B.G. should be for minimum period of 6 months.

**Liquid asset/credit facilities/Solvency certificate** (not older than 12 months from the date of availability of tender specification on e-procurement platform) issued by any Indian Nationalized Bank or scheduled bank of value not less than **Rs. 33.58 Lakh.**

**Turnover:** The bidder should have the turnover of value not less than **Rs.2.01 Cr** during the last three preceding financial years i.e., **2020-21 to 2022-23** put together.

5. **Key Personnel:** The bidder have to furnish the qualification certificates of the Key personal (Graduate Engineer/Civil – 1 No, Diploma Engineer/Civil – 1 No).
6. **Critical Equipment:** The bidder have to furnish the Declaration of critical equipment as per the list furnished in the "detailed tender notice" on non-judicial stamp paper of Rs 100/-.
7. **Statutory Requirement:** The bidder has to furnish the GST Registration certificate and IT returns.
8. **General Terms & Conditions:**  
*To qualify for consideration of award of contract each tenderer should fulfill the following criteria.*
  - i) The details and certificates are to be furnished as per NIT and tender specification.
  - ii) The bidder is subjected to be disqualified and liable for black listing and forfeiture of EMD if he is found to have misled or furnished false information in the forms/statements/certificates submitted in proof of qualification requirements.
  - iii) Even while execution of work, if found that the contractor had produced false/fake certificates of experience he will be liable for black listing and the contract will be liable for termination and liable for forfeiture of EMD and all the amounts due to him.
  - iv) Time is the essence of the contract. Those bidders who can complete the work within Specified time period only participate in tender for the subject work.
9. The bidders shall furnish copy of registration certificate (Registered with Central/any State Govt. Departments or Central/any State Govt. undertakings (Registration under process shall not be acceptable), their previous experience in works (completed works), copy of solvency certificate (not older than 12 months from the date of availability of tender specification on e-procurement platform) from any Indian Nationalized Bank or scheduled bank and other relevant particulars. The tenderer shall also furnish copies of certificates of Registration of EPF, Income Tax and GST etc., All the certificates/enclosures shall be attested by a Gazetted officer. No statements to the affect that they will be collaborating (or) forming consortium with some experienced firm will be accepted.
10. **APSPCL does not entertain any request for advance payment for the work**
11. In opening the tenders, the Part-I i.e., Pre-qualification Bid will be opened first. Only those tenders which contain the full information and which comply with the requirements regarding technical and financial qualifications, experience and equipment etc., will qualify for opening of Part-II i.e., Price Bid. **In this regard, the decision of APSPCL is final.**
12. The percentage on ECV quoted by the tenderer in Part -II i.e., Price Bid shall be firm till the completion of work.
13. Part -II i.e., Price Bid, in respect of qualified tenderers only will be opened on the dates notified.
14. The bidders should invariably upload the statement showing the list of documents etc., in the "e" market place in support of their Technical bids. The bidder should upload scanned copies of all relevant certificates. The bidder shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. **The Department shall carry out the technical bid evaluation solely based on the uploaded documents, BG/online**



**payment towards EMD in the e-procurement system and open the price bids of the responsive bidders.** The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, BG towards EMD prior to issue of LOI. In respect of construction equipment available with contractor, he must indicate which of the available equipment he proposes to mobilize for the work. The details of the owner ship of equipment are also to be furnished in Pre-qualification Bid. Statements that the contractor will hire the equipment from other agencies after award of work will not be entertained and such tenders are liable to be rejected.

## TENDER FORM

**To  
The Managing Director,  
APSPCL, Tadepalli,  
Guntur – 522 501.**

**Sir,**

I/We do hereby tender and, if this tender be accepted undertake to execute the work of *"APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P."* as shown in the drawings and as described in the specifications deposited in the office of the **Superintending Engineer/Civil/APSPCL, Tadepalli, Guntur - 522 501** with such variations by way of, alterations or additions to, and omissions from the said work and method of payment as are provided for in the "Conditions of Contract" **at the estimated contract value (ECV) PLUS (or) MINUS %** or such other sum as may be arrived at under the clause of the standard preliminary specification relating to "Payment on lump sum basis or final measurements at unit prices".

I/We agree to execute the work when the lump sum payment under the terms of agreement is varied by payment on measurement quantities.

I/We agree to keep the offer in this tender valid for a period of 180 days from the date of opening of tender and not to modify the whole or any part of it for any reason within the above period. If the tender is withdrawn by me/us for any reason whatsoever, within the validity period, the earnest money deposited by me/us will be forfeited to APSPCL.

I/We hereby distinctly and expressly declare and acknowledge that before the submission of my/our tender, I/We have carefully followed the instructions in the tender notice and have read the APSS and the Preliminary specifications therein and the APSS Addenda volume; and that I/We have made such examination of the contract documents and of the plan, specifications and quantities, and of the locations where the said work is to be done, and such investigation of the work required to be done, and in regard to the materials required to be furnished so as to enable me/us to thoroughly understand the intention of the same and the requirements, covenants, agreements, stipulations and restrictions contained in the contract and in the said plans and specifications and distinctly agree that I/We will not hereafter make any claim or demand upon the APSPCL based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements, covenants, agreements, stipulations restrictions and conditions.

If my/our tender is accepted, the earnest money shall be retained by the APSPCL as security for the due fulfillment of this contract. If upon written intimation to me/us by the Superintending Engineer/Civil/APSPCL/Guntur, I/We fail to attend the said office before the end of the period specified on such intimation the tender will not be considered and if, upon intimation being given to me/us by the Superintending Engineer/Civil/APSPCL/Guntur of acceptance of my/our tender, I/We fail to make the additional security deposit or to enter into the required agreement as defined **in clause 5 of the detailed tender conditions**, then I/We agree to the forfeiture of the Earnest money; Any notice required to be served on me/us here under shall be sufficiently served on me/us personally or forwarded to me/us by post (registered or ordinary) or left at my/our address given herein. Such notice if sent by post be deemed to have been served on me/us at the time when in due course of post, it would have been delivered at the address to which it was sent.

I/We fully understand that the written agreement to be entered into between me/us and the APSPCL shall be the foundation of the rights of both of the parties and the contract shall not be deemed to be completed until the agreement has first been signed by me/us and then by proper officer authorized to enter into contracts on behalf of APSPCL.

I/We am/are professionally qualified and my/our qualifications are given below.

S.No.	Name	Qualifications

I/We will employ at my/our own cost at least **1 (One) number Graduate Engineer and 1 (One) number Diploma Engineer** and other technically qualified staff in adequate numbers on full time basis and see that they are available at work site during working hours and also whenever required by the Engineer in-charge to take instructions and for arranging efficient and expeditious execution of work to the satisfaction of the Engineer-in-charge. In case we fail to employ the above mentioned technical staff we are agreeable for the recovery towards such default to be made from our bills at the rate of **Rs.50,000/- (Rupees Fifty Thousand only) per month or part thereof.**

The APSPCL directs that in the case of both Lump sum and K2 contract of Rs. 50,000 and above in value, the contractor irrespective of his class shall be required to employ the personnel on the concerned works at his own cost whether technical skill is required or not.

The appointment of staff shall be on full time basis and they shall be available at the work site whenever required by the Engineer-in-charge to take instructions. The contractor shall deploy required technical personal in addition to the above as per actual needs and as directed by the Engineer-in-charge.

I/ We have accepted the rate of progress i.e., the construction programme for the work as envisaged in this tender specification.

## DETAILED TENDER NOTICE

1. Tenders in single part for the work of **"APSPCL – LAD –KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P."** Should be in the prescribed form which can be obtained from 'e' procurement platform from the date of electronic publication up to the time and date indicated in the tender notice. The intending bidders shall enroll themselves on the 'e' procurement market-place [www.apecprocurement.gov.in](http://www.apecprocurement.gov.in). Those contractors who register themselves in the 'e' procurement market place can download the tender schedules free of cost. The bidder shall authenticate the bid with his digital certificate for submitting the bid electronically on e- procurement platform **and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-procurement platform** following the G.O.Ms.No.6, I.T&C Department, dated. 28.02.2005.

The intending bidders can download tender specification and submit their tenders online at e-procurement market place viz., [www.apecprocurement.gov.in](http://www.apecprocurement.gov.in). **The tender forms can be downloaded up to 4.00 PM on 17.05.2023. Bids can be submitted up to 5.00 PM on 17.05.2023 as per NIT.**

The Pre-qualification Bids will be opened through e-procurement platform by the **Superintending Engineer/Civil/APSPCL/Tadepalli on 18.05.2023 from 3.00 P.M onwards as per NIT** in his chambers at the address **Flat No: 501, 5<sup>th</sup> Floor, Garuda Enclave, Beside TG Plaza, Tadepalli (V & M), Guntur Distric,- 522501 and the Price Bids will be opened on 19.05.2023 from 3.00 P.M onwards**. If the tender opening day happens to be a holiday the tenders will be opened at the same timings mentioned above on the next working day. The tenderers or their authorized agents are expected to be present at the time of opening of tenders.

Intending bidders can contact office of the *Superintending Engineer/Civil/APSPCL/Guntur* for any clarification/ information on any working day during working hours

The bidders who are desirous of participating in e- procurement shall submit their Technical bid/Price bid etc., in the standard formats prescribed in the tender documents, displayed at "e" market place [www.apecprocurement.gov.in](http://www.apecprocurement.gov.in). The bidders should invariably upload the statement showing the list of documents etc., in the "e" market place in support of their Technical bids. The bidder should load scanned copies of all relevant certificates. The bidder shall sign on all the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. **Responsibility for correctness of the information submitted in the online bid lies with bidder. If any information furnished in the bid is proved to be false at a later date, the bid will not only be rejected but the bidder will be BLACKLISTED.**

The Bidder shall authenticate the bid with his digital certificate for submitting the bid electronically on e-Procurement Platform and the bids not authenticated by Digital certificate of the bidder will not be accepted on the e-Procurement platform.

The Department shall carry out the technical bid evaluation solely based on the uploaded documents, DD towards EMD in the e-procurement system and open the price bids of the responsive bidders.

The Department will notify the successful bidder for submission of original hard copies of all uploaded documents, DD towards EMD prior to issue of LOI.

The successful bidder shall invariably furnish the original DD towards EMD, Certificates documents of the uploaded scanned copies to the Tender Inviting Authority before issue of LOI either personally or through courier or post and the receipt of the same within the stipulated date shall be the responsibility of the successful bidder. The Department will not take any responsibility for any delay in receipt/non-receipt of original DD towards EMD, certificates/documents from successful bidder before the stipulated time. On receipt of documents, the Department shall ensure the genuinity of the DD towards EMD and all other certificates documents uploaded by the bidder in e-procurement system in support of the qualification criteria before issue of LOI.

If any successful bidder fails to submit the original hard copies of uploaded certificates/documents, DD towards EMD within the stipulated time or if any variation is noticed between the uploaded documents and the hard copies submitted by the bidder, the successful bidder will be suspended from participating in the tenders on e-procurement platform for a period of 3 years.

The e-procurement system would deactivate the user ID of such defaulting successful bidder based on the trigger/recommendation by the Tender Inviting Authority in the system. Besides this, the department shall invoke all processes of law including criminal prosecution of such defaulting bidder as an act of extreme of the deterrence to avoid delays in the tender process for execution of the development schemes taken up by the Government.

2. The bidder shall fulfill the following statutory requirements.

a) **Income tax Clearance Certificate:**

**The contractor shall furnish their copy of permanent Account Number (PAN) card and copy of latest income tax returns submitted along with the proof of receipt.**

b) **Labour Rules and Regulations:**

The contractor shall comply with all statutory labour rules and regulations for EPF, GIS/ESI, Labour cess, Contract labour rules, Workmen compensation etc., as may be applicable.

c) **Goods and Services Tax:**

The tenderer should have registration under GST in the state of Andhra Pradesh from concerned department. Applicable GST as on date is 18% of total value of the contract.

4. All the bidders shall invariably upload the scanned copies of the following documents on e-procurement system.

- i) BG/Online payment for EMD amount - This will be the primary requirement to consider the bid responsive. – Mandatory.
- ii) Contractor registration certificate – Mandatory.
- iii) Experience certificates of works for value within the block period – Mandatory.
- iv) Experience certificates in support of quantities executed within the block period – Mandatory.

- v) Solvency certificate – Mandatory.
- vi) Annual turnover certificate – Mandatory.
- vii) Qualification certificate of key personnel – Mandatory
- viii) Declaration of critical equipment proposed to be deployed on non-judicial stamp paper of Rs 100/- - Mandatory.

The below list of the minimum equipment required for completion of work.

- a) Trucks / Tippers (5 Cum) - 4 Nos.
- b) Shovel / Excavator - 1 No.
- c) Necessary equipment for affective completion of work.

- ix) GST Registration – Mandatory.
- x) IT Returns – Mandatory.

Other Documents to be uploaded:

- 1) Registration copies of EPF, ESI/Insurance.

Bid evaluation of the tenders would be done based on the certificates/ documents uploaded towards qualification criteria furnished by him/them.

In case of proprietary or partnership firm, it will be necessary to produce the certificates afore mentioned for the proprietor or proprietors and for each of the partners, as the case may be.

#### 4. Earnest Money Deposit:

Each bidder must pay Bid Security i.e., Earnest Money Deposit of **Rs.68,000/- (Rupees Sixty Eight Thousand Only)** while submitting their bids. The EMD shall be paid by way of online payment/ BG drawn on any nationalized bank/Scheduled bank in favour of Managing Director/APSPCL and payable at Vijayawada.

- i. The Earnest Money Deposit will be refunded to the unsuccessful tenderer after intimation of the rejection of the tender or at the expiration of 180 days from the date of tender whichever is earlier.
- ii. The Earnest Money will be retained in the case of successful tenderer and will not carry any interest. It will be dealt with as provided in the tender.
- iii. Tenderers are not permitted to withdraw their or his offer once made for a period of 180 days after the opening of the tenders and in the event of such tenderers withdrawing their tenders' within 180 days after opening of tenders, the Earnest Money deposited by him/them will be forfeited by the APSPCL

#### 4.1 In addition to the EMD, the balance amount of total up to 5% of the value of contract shall be paid by the successful tenderer as security deposit by way of Bank Guarantee/Demand Draft from PSU Banks approved by APSPCL as per proforma appended at the time of entering into the agreement. The above security deposit shall be furnished within fifteen (15) days from date of receipt of award. Further, 5% of the value of work done will be recovered as retention amount from the running bills for the due fulfillment of the contract.

**The Security deposit (including EMD) & Retention amount will be refunded to the contractor after satisfactory completion of performance guarantee period as all defects shall have been made good according to the true intent and meaning thereof. The guarantee period commences from the date of completion of the work in all respects satisfactorily. These amounts will not bear any interest.**

**4.2** Failure to enter into the required agreement or to make the security deposit as defined in the above paragraphs shall entail forfeiture of the earnest money deposit. The written agreement to be entered in between the contractor and the APSPCL shall be the foundation of the rights of both the parties and the contract shall not be deemed to be complete until the agreement has first been signed by the contractor and then by the proper officer authorized to enter into contracts on behalf of APSPCL.

**4.3** The work shall be commenced from the dates specified by APSPCL, otherwise EMD will be forfeited.

**If the successful tenderer fails to sign the agreement or otherwise commit default, the APSPCL shall have the right to recover damages according to law apart from forfeiting the earnest money deposit.**

## **5. Period of contract: 6 Months**

### **5.1 Programme of work**

The attention of the tenderer is directed to the contract requirements as to the time of beginning the work, the rate of progress and the dates for the completion of the whole work and its several parts.

The programme of work to be done from time to time is indicated below. However, the Executive Engineer / Engineer-in-charge of the work will decide the priority of various items of work and their location and direct the successful tenderer for execution so as to complete the entire work as required.

**The date of commencement of this work will be the date on which the site is handed over to the Contractor.** The agreement shall be concluded before the site is handed over to the contractor or before he draws any materials.

Further, it shall also be noted by the tenderer, if on any account, the work gets dislocated due to the site being not available for work on any day or due to any other reason, it is not binding on the APSPCL to pay any compensation to the contractor, but the corresponding extension of time will be granted to the contractor.

The construction programme for the works envisaged in the specification is indicated below:

<b><i>S.No.</i></b>	<b><i>Period after date of commencement</i></b>	<b><i>Cumulative Percentage of the work to be completed based on contract amount</i></b>	<b><i>Remarks</i></b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
1.	1 months	10 %	
2.	2 months	30 %	
3.	3 months	50 %	

<b>S.No.</b>	<b>Period after date of commencement</b>	<b>Cumulative Percentage of the work to be completed based on contract amount</b>	<b>Remarks</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
4.	4 months	70%	
5.	5 months	90%	
6.	6 months	100%	

The periods entered in column (3) for the purpose of defining the rate of progress may be altered by the Engineer-in-charge or appropriate authority authorized by APSPCL to suit the requirements of project completion.

If, due to any other reason beyond the control of the contractor, the progress is slow during any period indicated above, the same shall be made up in subsequent periods and the programme shall be complied within minimum possible time.

The Executive Engineer / Engineer -in-charge shall direct the sequence and pace of the parts of the work and the contractor shall comply with them. Payment will be effected as per actual work completed and based on the approved mode of payment.

- 6. TERMS OF PAYMENT:** Payment for running bills shall be made to the contractor progressively, based on certification of the Executive Engineer / Engineer-in-charge.

**Penalty: Action as per clause 60 and 61 of PS to APSS will be taken by the Executive Engineer / Engineer-in-charge if the contractor fails to adhere to the above programme of work.**

**Due to what so ever reasons, if work gets extended beyond the contract period, an amount equivalent to 5% of running account bill will be recovered in the extended period of contract from the running account bills and release or forfeiture of this in part or full will be dealt as per the approval of competent authority of APSPCL.**

- 7.** The **Superintending Engineer/Civil/APSPCL**, or other sanctioning authority reserves the right to reject any tender in full or part or all the tenders without assigning any reason there for. The quoted percentage shall be binding on the tenderer even if the **Superintending Engineer/Civil/APSPCL** awards part of the work.

**8. TAXES, DUTIES, TOLLS AND SEIGNIORAGE:**

The contractor shall, unless otherwise specially stated in the tender notice and subsequently on this basis in the contract, be responsible for the payment wherever payable of all import duties, octroi duties, seigniorage, quarry fees etc. on all materials and articles that he may use.

All taxes, duties, seigniorage and local cess charges, Turnover etc, except GST, EPF, GIS & Labour Cess payable to the Govt./Quasi Govt.Bodies at the rates as on the date of opening of tender are deemed to be included in the quoted prices. **The applicable GST as on date will be paid extra on submission of GST invoice. The payment of GST is the responsibility of the contractor. Seigniorage on metal, sand, gravel etc., and local cess will be recovered at rates fixed by competent authority from time to time from the contract bills and the same will be remitted to Mines & Minerals Department. However, **Seigniorage** charges will not**



recovered if the contractor submits the proof of payment of **Seignorage** charges to the concerned department. Statutory variations in the applicable rates or newly introduced taxes/duties, **Seignorage** and local cess will be to APSPCL account subject to the condition that the work has to be completed as per the time schedule stipulated in the contract/agreement.

The percentage less/excess on ECV quoted for the subject work shall be excluding **GST, EPF, GIS, & Labour Cess. EPF & GIS** will be reimbursed by APSPCL on production of proof of actual remittances made and subject to the satisfaction of Engineer-in-Charge that the said contribution done is only for the workers employed on this work.

Labour cess will reimbursed to the contractor as per actual on production of proof of payment as per the building and other construction welfare cess act 1996. APSPCL will not reimburse any excess payment made by the contractor for any of the above due to mis-interpretation of law or any other reason.

No GST will be collected from the contractor for the materials supplied by the APSPCL at free of cost.

Notwithstanding anything contained in Section 10 of the Indian Tariff Act, of 1894, the rates for item involving the use or supply of articles obtained by the contractor from outside India shall remain unaffected by any changes that may be introduced in the Customs duties.

Other taxes and duties levied by the Central/State Govt. prevailing as on the date of opening of tenders shall be to the contractor's account and the percentage less/excess on ECV value quoted shall be inclusive of them. Any increase in taxes and duties shall be to APSPCL's account. If there is any decrease in taxes and duties, credit shall be given to APSPCL to that extent.

The APSPCL will not however be responsible for payment any other tax made by the contractor under misapprehension of law.

## **9. Supplemental Items:**

The contractor is bound to execute all supplemental items beyond 10% of agreement quantity, deductible from similar items in the original agreement and new items that are found essential, incidental and inevitable during execution of main works, at the rates to be worked out as detailed below.

### **a. Fixation of rates for items of work in excess of quantities in Schedule-A Bill of Quantities of tender**

The percentage less/excess on ECV quoted by the tenderer shall hold good up to 10% of quantity over those given in Bill of Quantities. Approval of competent authority is to be obtained for execution of quantities in excess of 10% beyond agreement quantity and supplemental items and new items.

For all items of work which are in excess of 10% over and above the quantities shown in Schedule-A Bill of Quantities of the tender, the rate payable for such excess quantities shall be either agreement rates or sanctioned estimate rates plus or minus overall tender percentage accepted by the competent authority whichever is less.

**b. Supplemental items directly deductible from similar items in the original agreement**

The rates shall be derived by adding to or subtracting from the agreement rates of such similar items, the cost of the difference in quantity of material or labour between the new item and the similar item in the agreement worked out with reference to the schedule of rates adopted in the sanctioned estimate with which the tenders were compared plus or minus overall tender percentage.

**c. New Items:**

- i) Similar items, the rates of which cannot be directly deduced from the original agreement.
- ii) Purely new items which do not correspond to any item in the agreement.

The rate shall be estimate rate plus or minus overall tender percentage.

**Note:** in the term estimate rate used (i) and (ii) above means the rate in the sanctioned estimate with which the tenders were compared or if no such rate is available in the estimate, the rate derived with reference to the schedule of rates adopted in the sanctioned estimate with which tenders are compared.

**d. Addition of provision towards importation of labour, labour amenities, dewatering etc., in working out supplemental items:**

In respect of new items, the case has to be considered on its merits and provision for importation of labour, labour amenities, dewatering etc., has to be fully justified.

If the new item is in substitution of an old item which allowed for importation of labour, labour amenities, dewatering etc., those factors may be taken into account in computing the substituted items also at the same rates at which they were originally provided.

**10.0** The clause 69 (b) of PS to APSS is deleted. The following may be read in its place:

"Whenever the withheld amount reaches Rs.1,000/- or a multiple thereof, the contractor may, at his option, to deposit with the Engineer-in-charge, an equal amount in sum of Rs.1,000/- or multiples thereof in any of the forms of interest bearing securities recognized for the purpose by A.P. Public Works Accounts Code and subject to the provisions therein contained or a Bank Guarantee of a Nationalized Bank in which case the equivalent withheld amount shall be paid to him forthwith."

The contractor will be permitted to exercise the option in this clause, subject to the condition that the rate of progress contained in the Articles of Agreement is properly maintained.

**11.0** Preliminary specifications of APSS except clause 73 shall apply to all agreements entered by the contractor with APSPCL and shall form an inseparable condition of the contract. The tenderer is expected to examine closely the relevant specifications of the APSS and special specifications and ISS before submitting his tender offer.

**Note:** In case of contradiction between the clauses included in this specification and the clauses of PS to APSS the former will prevail over the latter and is binding on the tenderer.

## 12.0 ARBITRATION

All or any disputes or differences arising out of or touching the order based on this specification shall be decided by a panel of arbitrators as detailed below and as per arbitration act No.1 of 1990 to the Arbitration Act 1940 amended vide G.O.No.7 dt.19-05-1990.

<b><i>Value of claim</i></b>	<b><i>Panel of Arbitrators</i></b>
Disputes involving amounts up to Rs. 10,000/- and below.	Superintending Engineer of the APGENCO other than the circle to which the disputes relate.
Disputes involving amount from Rs. 10,000/- to Rs. 50,000/-	Any Chief Engineer of the APGENCO other than concerned Chief Engineer.

There shall not be any reference of disputes, the value of which is above Rs.50,000/- to arbitration. The parties shall approach the competent Civil Courts having jurisdiction, if any such disputes shall arise.

### **TENDERER'S AND CONTRACTOR'S CERTIFICATE**

- a) We expressly state that we will be bound by the conditions of PS to APSS and that the contract shall be deemed to be concluded on the receipt of letter of acceptance. If thereafter we do not sign the contract or otherwise commit default, the APSPCL will be at liberty to forfeit the earnest money and recover damages in accordance with law.
- b) We hereby declare that we have perused in detail and examined closely in the APSS all clauses of preliminary specifications and have either examined all the standard specifications for items for which we tender, before we submit such tender and we agree to be bound by and comply with all such specifications for all agreements which we shall execute in the APSPCL. We have signed here below in acknowledgement thereof.
- c) We certify that we have inspected the location of the proposed work before quoting our percentage, we have also inspected the source of materials and network of roads and satisfied ourselves about the quality, availability and transport facilities for required materials through the net work of available roads and path-ways, required for the work and verified the correctness of the leads statement.
- d) We are prepared to furnish detailed data in support of all our quoted percentage, when called upon to do so without any reservations.

#### **Signature of Tenderer/contractor**

Name : \_\_\_\_\_

Designation : \_\_\_\_\_

Company : \_\_\_\_\_

Date : \_\_\_\_\_

**Seal of Company**

## **SECTION - I**

### **SUPPLEMENTAL CONDITIONS TO THE PRELIMINARY SPECIFICATIONS TO THE APSS**

The following conditions shall also be followed in addition to those mentioned in P.S. to the A.P.S.S.

**1. FUNCTIONING OF THE CONTRACT**

The contractor shall carryout all directions and orders issued by the Executive Engineer / Engineer – in – charge connected with the work and shall communicate with him regarding all matters pertaining to the contract.

**2. CONTRACT INCLUDES ALL NECESSARY OPERATIONS**

The contractor is to include the whole of works whether permanent or temporary which are described in or implied by the contract documents, which may be inferred to be obviously necessary for the efficiency, stability and completion of the permanent works, also the performance of all other operations and the supplying of all materials and things described in or implied by the contract documents which may be deemed desirable or required for the completion in all respects of the above works to the entire satisfaction of the Executive Engineer / Engineer – in – charge and all such matters shall be deemed to be included in the contract.

Works shown in the drawings and not mentioned in the specifications or described in the specifications without being shown in the drawings shall nevertheless be held to be included in this contract, in the same manner as if they had been expressly shown in the drawings and described in the specifications also.

**3. OTHER CONTRACTS FOR THE WORK:**

Should the APSPCL enter into other contracts for specified items of the corporate work, each contractor shall co-operate with others to the fullest extent and shall allow each other every facility and co-ordination for execution of their works simultaneously and satisfactorily as intended in the designs, specifications and drawings. Should there be dispute or disagreement between the contractors for any cause whatsoever, the same shall be referred to the Executive Engineer / Engineer – in – charge whose decision regarding the co-ordination, co-operation, and facilities to be provided by any of the contractors to the others shall be final and binding on all parties and such a decision shall not vitiate any contract nor absolve the contractor of his responsibilities under the contract.

**4. SAFETY MEASURES**

The contractors shall take all necessary precautions for the safety of workers and in preserving their health while working in such jobs as require special protection and preventive steps. The following are some of the measures listed but the same are not exhaustive and the contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with the directions issued by the Executive Engineer / Engineer – in - Charge in this behalf from time to time, and at all times.

- i) Providing protective foot wear to workers in site situations like mixing and placing of mortar or concrete in places where the work is done under too much wet conditions.
- ii) Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle them independently and taking all necessary precautions in and around the areas where machines, hoists and similar units are working.

## SECTION - II

### SITE CONDITIONS

#### 1. LOCATION & GENERAL DESCRIPTION

Kurnool Ultra Mega Solar Park site is situated at about 40 KM from Kurnool. The nearest Railway station is Kurnool. Nearest town is Kurnool. The project information and data is given below:

1.01	Owner / Purchaser	:	Andhra Pradesh Solar Power Corporation Private Limited ( <b>A J V COMPANY OF GOVT OF ANDHRA PRADESH AND GOVT OF INDIA</b> )
1.02	Project Title	:	Kurnool Ultra Mega Solar Park
1.03	Nearest Railway Station	:	Kurnool (40 KM from site)
1.04	Name of Railway	:	South Central Railway
1.05	Nearest Airport	:	Tirupathi (220 KM from site)
1.06	Altitude	:	(+) 430 m EL above mean sea level
1.07	Climate	:	Tropical-Hot-Humid
1.08	<b>Ambient Temperature (Dry Bulb)</b>		
	a) Daily maximum (Mean)	:	33.0 Deg. C
	b) Daily minimum (Mean)	:	25.0 Deg. C
1.09	<b>Relative Humidity</b>		
	a) Maximum Humidity	:	64 percent
	b) Minimum Humidity	:	35 percent
	c) Average Humidity	:	49 percent
1.10	<b>Rainfall</b>		
	a) Maximum intensity	:	60 mm per Hour
	b) Annual Average	:	560 mm
	c) Tropical monsoon	:	June to October
1.11	<b>Wind Velocity &amp; Pressure</b> (As per IS: 875-1987 Part III)		
	Basic Wind Speed	:	50 m/sec
1.12	Seismic Zone	:	Zone II as per IS: 1893-2002
1.13	<b>Transport</b>		
	a) Name of highway near which the plant is located	:	Tadipatri to Jammalamadugu High way
	b) Railway (Gauge)	:	Broad Gauge.

## 2. SITE CONDITIONS

Before submitting the tender, the tenderer shall familiarize himself with the site conditions.

### SECTION – III

#### RULES FOR PROVISION OF HEALTH AND SANITARY ARRANGEMENTS TO WORKERS

Rules for the provision of health and sanitary arrangements for workers shall be applicable to all classes of workers. The Contractor's special attention is invited to Clause 37, 38, 39 & 51 of PS to the APSS and he is requested to provide amenities like First Aid, Drinking Water etc at his own expense to the satisfaction of the Executive Engineer-in-Charge.

#### SPECIAL CONDITIONS OF CONTRACT

##### 1.0 GENERAL

1.1 The word 'Special Conditions' shall be understood to cover all elements **effective in determining unit prices such as availability of materials**, price of materials, quantity and quality of available labour and their cost, or every other factor whatsoever, of major or secondary importance which has to be accounted for in quoting prices.

1.2 For the work covered by the Technical Specifications (Section IV) the bidder shall quote his percentage less/excess on ECV value based on the Bill of quantities (Schedule 'A') in words and figures.

Said percentage less/excess on ECV value shall bind on the bidders and shall include any expense whatsoever in connection with the delivery of materials at field site, the use of tools and equipment, cost of technical staff and labour and every other charge connected with and incidental to the complete and through execution of work.

1.3 The bidder shall make at his own risk and cost, before submitting his tender, all surveys he might consider necessary and he may carry out any market survey or technical enquiry he might require to check either the suitability of available materials or the site conditions, soil conditions etc. Permission to visit site will be granted to those bidders who have purchased the tender documents.

1.4 The contractor shall note that the scope of work and the quantity of individual items of work may vary to any extent (on the plus or minus side) as necessary during execution. The contractor shall be bound to execute all the works including above variation in quantity of individual items and extra items or additional items of work shall be executed by him as per the relevant clauses of the contract. In awarding the work against the subject specification to the contractor, APSPCL reserves the right to take out of the scope of the contract part of the work. The contractors shall have no claim for loss of profit sustained because some portions of the original contract have been allocated elsewhere nor will this be reason for the contractors to increase/decrease the percentage for the remaining portion of the contract which he shall fulfill in accordance with the contract.

The preliminary estimated quantities given in the Schedule 'A' are not to be taken as binding figures and they may vary to any extent. These quantities have been provided only for the purpose of providing a comparison of various proposals and to give bidder approximate information as to the amount of work to be performed. The total value of work actually carried out shall be measured and paid for.

#### 1.5 **Technical Specifications**

Technical specifications for major items are described in section IV of this document. For those items which may not be covered under Section IV, the contractors shall follow the relevant Indian Standard Specifications (latest edition) with the approval of the Engineer-in-charge/Engineer-in-Charge.

#### 1.6 **Special Notes**

The contractor shall be responsible for any delay and damage except due to force majeure reasons which are generally beyond their control and for this full justification elaborating such circumstances shall be furnished by them.

- 1.7 The contractor shall be under no liability whatsoever for damage or destruction to the work or temporary work or materials and equipment or to property or like which is due to acts of God, earthquake, lightening, gale, typhoon, storm, hurricane, or act of any Government or Strikes or Lockouts or converted action of workmen or civil War (Whether declared or not) or sabotage explosion, Civil commotion, Police action, revolution, epidemics etc., destructive artesian conditions, nuclear fusion, or Radio active disturbances etc., which they have no control and directly or indirectly affecting the operation of the contract.

- 2.0 **Tenders quoted abnormally less, i.e., more than 15%, a B.G obtained in favour Managing Director/APSPCL on the State Bank of India / Andhra Bank or any Nationalized bank payable at Hyderabad for the difference between the tendered amount and 85% of the estimate value shall be furnished by the contractor invariably as additional security deposit. The period of validity of B.G shall be for a minimum period of six months. This B.G. shall not bear any interest. On successful completion of the work, the B.G. will be returned to the contractor. The period of validity shall be extended by the contractor from time to time till the B.G. is returned.**

**In case of contractors failing to complete the work at agreement rates, the B.G. furnished will be forfeited by the APSPCL**



## **GENERAL CONDITIONS OF CONTRACT**

### **1.0 DEFINITION & INTERPRETATIONS**

In these general conditions of contract the following terms shall have the meanings assigned to them except where the context otherwise required.

- 1.1 "OWNER/CORPORATION" means Andhra Pradesh Solar Power Corporation Pvt., Limited (A J V Company Of Govt., Of Andhra Pradesh And Govt., Of India) and shall include their legal representative, successors and permitted assignees.
- 1.2 The "Contractor" means the individual or firm or company whether incorporated or not, under taking for execution of works and shall include legal representatives of such individual or persons composing such firms or unincorporated company successors of such firms or company as the case may be, and permitted assignees of such individual or firm or company.
- 1.3 "Contract" means the notice inviting tender, the tender and acceptance there of and the formal agreement, if any, executed between Andhra Pradesh Solar Power Corporation Pvt., Limited and the contractor together with the documents referred to therein including those conditions with appendices and any special conditions, the specifications, designs, drawings, schedule of quantities with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- 1.4 The "Engineer-in-charge" means the engineering officer appointed by the corporation or his duly authorized representative who shall direct, supervise and be in charge of the works for the purpose of this contract.
- 1.5 "Work" means the works to be executed in accordance with the contract.
- 1.6 "Specifications" means the specifications forming a part of the contract for materials and works for the execution of the contract and as amplified, added or specified by special specifications, if any.
- 1.7 "Site" means the lands and or other place on, under on or through which the work is to be executed under the contract including any other lands or places which may be allotted by the corporation or used for the purpose of the contract.
- 1.8 "Letter of Award" shall mean the official notice issued by the OWNER notifying the contractor that his tender has been accepted.
- 1.9 "Guarantee period" shall mean the period during which the contractor shall remain liable for repair of any defect of the works performed under the contract.
- 1.10 Where the context so requires, words imparting the singular only also include the plural and vice-versa.
- 1.11 Heading & marginal notes to those General conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction there of or of the contract.
- 1.12 All the documents pertaining to the contract including specifications, schedules correspondence etc., shall be written in English language.

**2.0 CONTRACTOR TO INFORM HIMSELF THE FOLLOWING:**

- 2.1 The contractor shall be deemed to have carefully examined all contract documents to his entire satisfaction. If he shall have any doubt as to the meaning of any portion of the contract documents, he shall, before signing the contract, set forth the particulars thereof and submit them to the corporation in writing in triplicate, in order that such doubts may be removed. The corporation will provide such clarification as may be necessary in writing to the contractor. Any information otherwise obtained from the corporation or the ENGINEER shall not in any way relieve the contractor of his responsibility to fulfill his obligations under the contract.

**3.0 DISCREPANCIES AND ADJUSTMENT OF ERRORS:**

- 3.1 If there are varying or conflicting provisions made in any documents forming part of the contract, the Managing Director shall be deciding authority with regard to the intention of document.
- 3.2 Any error in description, quantity or rate in schedule of quantities or any omission there from shall not vitiate the contract or release the contract from the execution of the whole or any part of the works completed therein according to the specification or from any of his obligations under the contract.
- 3.3 If on check, there found to be differences, between the percentage less/excess on ECV value given by the contractor in words and figures by him in the Schedule of quantities and general summary the same shall be adjusted in accordance with the following rules.
- a) In the event of a discrepancy between description in words and figures quoted by a tenderer, the description in words shall prevail.
  - b) The under signed does not bind himself to accept the lowest or any tender. The undersigned reserves the right to reject any or all tenders without assigning any reason.
  - c) Persons tendering must acquaint themselves and satisfy as to the physical conditions prevailing at the site.
  - d) No telegraphic/Fax offers will be entertained and APSPCL Ltd will not consider any postal delay.
  - e) The APSPCL reserves the right of deleting any or all items of the works mentioned in the schedule without assigning any reasons thereof. The tenderer will not be eligible to claim any sort of compensation in this regard.
  - f) The contractor shall provide to his workmen the required safety appliances including protective clothing and guards such as helmets, safety shoes, hand gloves, masks, safety belts etc., for working in Hazardous areas which shall be identified by the Engineer-in-charge.
  - g) The contractor will be required to work either in hot or cold areas, near machines in operation otherwise involving special care on part of the contractor to see that the work is carried out with safety to the men and machines and without hampering the working of the concerned departments of the corporations.

#### **4.0 SUBLETTING OF WORKS**

- 4.1 The contractor shall not assign or sublet the contract or any part thereof, allow any persons to become interested therein in any manner whatsoever without the special written permission of Superintending Engineer / Civil / APSPCL / Hyderabad. The contractor can sublet only up to a maximum of 50% of contract with the prior approval of Superintending Engineer / Civil / APSPCL / Hyderabad. Any breach of this condition shall entitle the corporation to rescind the contract and also render the contractor liable for payment to corporation in respect of any loss or damage arising or ensuring from such cancellations. The permitted subletting of work by the contractor shall not establish any contractual relationship between the sub-contractor and corporation and shall not relieve the contractor of any responsibility under the contract. In the event of sufficient dues not being available to reimburse corporation for the expenditure incurred by it for the above contractor shall reimburse corporation for the same.

#### **5.0 ELECTRICAL SAFETY REGULATIONS**

- 5.1 In no circumstances shall the contractor interfere with the fuses and electrical equipment belonging to the APSPCL or other contractors. Before the contractor connects and electrical appliances to any Board or Socket belonging to other contractors or APSPCL shall:
- a) Satisfy and obtain permission of the Engineer-in-charge to that effect.
  - b) No electrical cable used by the contractor will be disturbed without prior permission.
  - c) No weight of any description will be imposed on any such cable and no ladder or equipment will rest against or be attached to it. No work shall carry or any live equipment without PERMIT TO WORK.

#### **6.0 FIRE PROTECTION**

- 6.1 The work procedures that are to be used during the execution of work shall be those, which minimize fire hazards to the extent practicable. Combustible materials, combustible waste and rubbish shall be collected and removed from the site at least once in a day. Fuel oil, volatile or flammable materials shall be stored away from the work areas in safe containers. All the materials such as working drawings, documents etc., which are combustible but essential for the works to be executed shall be protected against combustion resulting from welding sparks, cutting, flanges and other similar fire sources, while doing welding, gas cutting work at elevated levels all care should be taken to protect sparks falling down by providing suitable coverage to avoid free fire and ensuring safety to personnel working in neighborhood.

#### **7.0 SECURITY**

- 7.1 The tenderer/Contractor shall have total responsibility for all equipment and materials in his custody, loose, semi-assembled and/or erected serviced overhauled by him at site. The Tenderer/Contractor shall make suitable security arrangements including deployment of security personnel to ensure the protection all materials, equipment and works from theft, fire, pilferage and any other damages and loss.

## 8.0 DEFECT LIABILITY

The contractor shall be responsible to make good and remedy at his own cost within such a period as may be stipulated by the Engineer-in-charge any defect observed during the course of execution or which may develop or may be noticed before the expiry of the period mentioned in the Guarantee clause on intimation of which has been sent to the contractor within seven days of expiry of the said period by a letter sent by hand or Registered post.

## 9.0 GUARANTEE:

- 9.1 The contractor shall guarantee that all items executed by him shall be free from all defects and workmanship up to completion of work in all respects.
- 9.2 APSPCL shall also be entitled to recover any losses direct or indirect incurred due to non-fulfillment of contractual commitment in this regard.
- 9.3 There is no Guarantee period for this work.

## 10.0 URGENT WORKS

- 10.1 If any urgent work (in respect where for the decision or Engineer-in-charge is final and binding) becomes necessary and the contractor is unable or unwilling at once to carry it out the Engineer-in-charge may by his own or other people, carry it out as he may consider necessary if the urgent work is such as a contractor is liable under the contract to carry out at his expense. All expenses incurred on it by the corporation shall be recoverable from the contractor and be adjusted or set off against any sum payable to him.

## SECTION – IV

### TECHNICAL SPECIFICATIONS

#### 1.00 GENERAL

- 1) This specification is to cover plantation and maintenance of plants for the proposed work "**APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**" promoted by M/s. Andhra Pradesh Solar Power Corporation Pvt., Limited.
  - 2) Description of various items of work under this specification and nature of work in detail are given hereinafter. The complete work under this scope is referred to as CIVIL WORKS. List of various civil works covered given under the scope.
  - 3) The work to be performed under this specification consists of providing all labour, materials, consumables, equipment, temporary works, temporary labour and staff colony, constructional plant, fuel supply, transportation and all incidental items not shown or specified but reasonably implied or necessary for the completion of the work, all in strict accordance with the specifications and including revisions and amendments thereto as may be required during the execution of the work.
  - 4) All materials shall be arranged by the CONTRACTOR.
  - 5) The scope shall also include setting up of complete testing laboratory, by the CONTRACTOR, in the field to carry out all relevant tests required for the civil works for the project.
  - 6) The work shall be carried out according to the approved drawings by the APSPCL. Necessary layout and details are to be developed by the CONTRACTOR keeping in view the statutory & functional requirements and facilities of the proposed work. The quantities given in the Schedule of quantities are approximate and likely to change as per the approved drawings.
  - 7) CONTRACTOR shall inspect the site, examine and obtain all information required and satisfy himself regarding matters and things such as access to site, communications, transport, right of way, the type and number of equipment and facilities required for the work, availability of local labour, materials and their rates, local working conditions, weather, flood levels, subsoil conditions, natural drainage , etc., The contractor shall organize his own arrangements to transport his equipment, men and materials so as to match the construction schedules. Ignorance of the site conditions shall not be accepted by the APSPCL as basis for any claim for compensation or extension of time. The submission of a bid by the CONTRACTOR will be construed as evidence that such an examination was made and any later claims / disputes in this regard to rates/lump sum quoted shall not be entertained or considered by the APSPCL.
- 1.1.** The bidders shall resolve himself the local issues, if any, during the execution without any financial implications to APSPCL.

#### 2.00 Statutory Requirement

CONTRACTOR shall comply with all the applicable statutory rules pertaining to Factory act, Fire safety rule of Tariff Advisory Committee, Water act for Pollution control, Explosives act etc. Provisions of Safety, health and welfare according to Factories act shall also be complied with. Statutory clearances and norms of State

Pollution Control Board shall be followed. APSPCL will assist in obtaining the necessary clearances from other departments.

- 3.00** The specifications for various works should confirm to the relevant clauses of the APSS, Earth manual of USBR, MORD & MORTH and also to the special specifications included in the tender schedule. If there is any difference between them, the special specifications will be applicable. If for any item of work, detailed specifications are not indicated either in the technical specifications or in the APSS and Earth manual of USBR, MORD & MORTH then that work shall be carried out as per the instructions of Engineer-in-charge. The execution of work and tests to be conducted during construction and on the materials shall confirm to the latest relevant I.S codes.

**4.00 SCOPE OF WORK:**

In general broad scope of work consists of the following:

- a) Removal of silt and silt mixed with sand from MI Tank bed.

The work shall be executed as per relevant Indian Standard Specifications. The work shall be complete in all respects under this specification shall include but not limited to the following.

**5.00 REMOVAL OF SILT AND SILT MIXED WITH SAND FROM MI TANK BED:**

The firm shall arrange for Removal of silt and silt mixed with sand from MI Tank bed for increasing the storage capacity of the tank including disposing the same in spoil bank or on the Tank bund embankment in layers with initial lead up to 1 KM, dressing of bed and sides to required level and profile including cost and conveyance of all materials, machinery, hire charges of machinery, labour charges, placing the excavated Silt neatly in dump area or for formation of bund etc., complete for finished item of work as directed by Engineer- in- Charge and as per SS No. 301 of APDSS.

**5.01 MODE OF PAYMENT:** The payment shall be made on the basis of Cum.

**SCHEDULE - A****BILL OF QUANTITIES**

- a) The quantities given in the bill of quantities are approximate but they are subject to alterations, omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The unit rates noted below are those governing payment of extras or deductions for omissions according to the conditions of the contract as set forth in the preliminary specifications of the A.P. Standard Specifications and other conditions and specifications of this contract.
- b) It is to be expressly understood that the measured work is to be taken net (not withstanding any custom or practice to the contrary) according to the actual quantities when in place and finished according to the drawings or as may be ordered from time to time by the Engineer-in-charge and the cost calculated by measuring or weight at the respective prices without any additional charges for any necessary or contingent works connected therewith.
- c) For all items of work which are more than 10% in excess of the quantities shown in the bill of quantities the rate payable for excess quantities beyond 10% shall be either tender rate or the SS rate for the item plus or minus the overall tender percentage whichever is less. The SS rate means the rate within the estimate has been prepared for comparison with tenders.
- d) The rates quoted by the contractor are firm till completion of the work in all respects. No price variation of rates is allowed in case of delay in handing over of site to the contractors, if any by the department. However, corresponding extension of time will only be granted to the contractors.

<b><u>SCHEDULE- A</u></b>							
<b>Name of Work : APSPCL – LAD – KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.</b>							
<b>S. No</b>	<b>Quantity</b>		<b>Description of item</b>	<b>Rate</b>	<b>Per</b>		<b>Amount</b>
1	73000.00	Cum	Removal of silt and silt mixed with sand from MI Tank bed for increasing the storage capacity of the tank including disposing the same in spoil bank or on the Tank bund embankment in layers with initial lead up to 1 KM, dressing of bed and sides to required level and profile including cost and conveyance of all materials, machinery, hire charges of machinery, labour charges, placing the excavated Silt neatly in dump area or for formation of bund etc., complete for finished item of work as directed by Engineer- in- Charge and as per SS No. 301 of APDSS.	92.00	1.00	Cum	Rs. 67,16,000.00
			<b>Estimate Contract Value</b>				<b>Rs. 67,16,000.00</b>

Note: The rate shall be exclusive of GST which will be reimbursed as per applicable rates.



**SCHEDULE – B****ISSUE RATE OF MATERIAL:**

**Name of the Work:** **APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**

SI.No.	Description of Item	Rate	Source of Supply
1	NIL	NIL	NIL

**SCHEDULE – C**

**Name of the Work:** **APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**

S. No.	Description of item	Source
1	NIL	NIL

Note: The above information given above is indicative only. The firm shall make his assessment regarding availability of above materials in adequate quantity and quality and the distance of the source etc., before quoting his rates and no claim will be entertained on this account afterwards.

**SCHEDULE – D****LIST OF TENDER PURPOSE DRAWINGS ENCLOSED TO THIS SPECIFICATION**

**Name of the Work:** **APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**

SI.No	TITLE
1	

**PARTICULARS OF TENDERER**

**Name of the Work:**     **APSPCL – LAD –KUMSP(1000 MW) –Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P.**

Name of the Tenderer/ Contractor:

Name of the contact person responsible for the work:

Designation/ Status of the contact person:

Contact Details of the person responsible for the work:

Mobile Phone No.

Office Phone No.

Residence Phone No.

Any Other Phone No.

Present Address:

Permanent Address:

**BANK GUARANTEE PROFORMA**

**To,  
The Managing Director,  
APSPCL, Tadepalli.**

**Dear Sir,**

**Guarantee No** :  
**Amount of Bank Guarantee** :  
**Guarantee Cover From** :  
**Last Date for Lodgment of Claim** :

WHEREAS \_\_\_\_\_ (hereinafter  
called "the Contractor") has undertaken, in pursuance of  
\_\_\_\_\_ for the work of  
\_\_\_\_\_.

AND WHEREAS it has been stipulated by you in the said tender that Rs. \_\_\_\_\_ of  
EMD amount shall be paid by the contractor for participating in the tender.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on  
behalf of the Contractor, up to a total of Rs. \_\_\_\_\_, such sum  
being payable in the types and proportions of currencies in which the Contract Price is  
payable, and we undertake to pay you, upon your first written demand and without cavil  
or argument, any sum or sums within the limits of Rs. \_\_\_\_\_  
(amount of Guarantee) as aforesaid without your needing to prove or to show grounds  
or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor  
before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the  
tender or of the Works to be performed there under or of any of the Contract documents  
which may be made between you and the contractor shall in any way release us from  
any liability under this guarantee and we hereby waive notice of any such change,  
addition or modification.

This Guarantee will remain in force up to and including the date \_\_\_\_\_ any  
demand in respect of this guarantee should reach the Bank not later than the above  
date.

Not with standing anything contained herein above:

1. Our liability under this Bank Guarantee shall not exceed Rs. \_\_\_\_\_.
2. This Bank Guarantee shall be valid up to \_\_\_\_\_.
3. We are liable to pay the Guarantee amount or any part thereof under this bank guarantee only and only if the beneficiary / Govt. serves upon the Bank a written claim or demand on or before \_\_\_\_\_ (date of expiry of Guarantee).

It is in the best interest of the beneficiaries to check up the genuiness of the Guarantee with the branch you may contact us and you may confirm the guarantees through fax.

DATE:

SIGNATURE OF THE BANK

SEAL

Witness 1 :  
(Name & Address)

Witness 2 :  
(Name & Address)

### **BANK ACCOUNT MANDATE FORM**

#### **ELECTRONIC CLEARING SERVICE (CREDIT CLEARING)/REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS**

**A. DETAILS OF ACCOUNT HOLDER:**

<b>NAME OF ACCOUNT HOLDER</b>	
<b>COMPLETE CONTACT ADDRESS</b>	
<b>TELEPHONE NUMBER/FAX/E.MAIL</b>	

**B. BANK ACCOUNT DETAILS :**

<b>NAME OF THE BANK</b>	
<b>BRACH NAME &amp; ADDRESS</b>	
<b>WHETHER THE BRANCH IS COMPUTERISED?</b>	
<b>WHETHER THE BRANCH IS RTGS ENABLED ? IF YES, THEN WHAT IS THE BRANCH'S IFSC CODE</b>	
<b>IS THE BRANCH IS ALSO NEFT ENABLED ?</b>	
<b>TYPE OF ACCOUNT (SB/CURRENT/CASH CREDIT)</b>	
<b>COMPLETE BANK ACCOUNT NUMBER</b>	

**DATE OF EFFECT:** \_\_\_\_\_

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the APSPCL responsible.

**Signature of Contractor**

Date:

Certified that the particulars furnished above are correct as per our records.

**Signature of Banker**

(Bank's Stamp)

Date:

## **INTEGRITY PACT**

Between

**Andhra Pradesh Solar Power Corporation Private Limited** hereinafter referred to as "**APSPCL**",

And

..... herein after referred to as "**The Bidder / Contractor**"

The APSPCL intends to call tenders and award the work under laid down organizational procedures, contract/s for the work of **"APSPCL – LAD –KUMSP(1000 MW) – Desilting of sekunala MI tank to increase the storage capacity for balance area at sekunala Village of Gadivemula Mandal of Nandyal District. A.P."**

The APSPCL and the Bidders shall value the full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in bidding and as well as execution of contracts and both the parties shall adhere to the following.

### **1. Commitments of the APSPCL**

- a. No employee of the APSPCL, personally or through family members, will in connection with the tender or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The APSPCL will, during the tender process treat all Bidder(s) with equity and reason. The APSPCL will in particular, before *and* during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

### **2. Commitments of the Bidder(s)/ contractor(s)**

- a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the APSPCL's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the APSPCL as part of the business relationship, regarding plans, technical proposals and

business details, including information contained or transmitted electronically.

3. If the Bidder(s)/Contractor(s), before award or during execution commits a transgression through a violation of clause 2, above or in any other form such as to put his reliability or credibility in question, the APSPCL is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process and exclusion in future tenders.
4. If the APSPCL disqualifies the Bidder(s) from the tender process prior to the award as per clause 3 above, the APSPCL is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
5. If the APSPCL terminates the contract or if the APSPCL is entitled to terminate the contract according clause 3 above, the APSPCL shall be entitled to demand and recover from the contractor liquidated damages of the Contract value or the amount equivalent to Performance Guarantee.
6. The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact.
7. The Integrity Pact begins from the date of tender notification and expires after the contractor receives the last payment under the contract.

\_\_\_\_\_  
(For & On behalf of the APSPCL)

(Office Seal)

\_\_\_\_\_  
(For & On behalf of Bidder/ Contractor)

(Office Seal)

Place -----

Date -----

Witness 1 :  
(Name & Address)

Witness 2 :  
(Name & Address)

## **Specification No. 301**

### **Excavation and Forming Uncompacted Banks**

**301.1. Scope :—**This specification applies to excavation of canals, drains, etc., when the excavated soil need not be formed or laid into uniform layers and also when breaking clods, ramming and neat sectioning of the bank are not required.

#### **301.2. Excavation :**

**301.2.1.** Drain or canal sections shall be excavated as specified or as directed by the Executive Engineer. Both the inner edges of the bank shall be neatly laid symmetrically to the centre line of the channel. They shall as far as possible be straight in straight reaches and smoothly curved on bends. All gangways, pathways and landings shall be such that they fall within the canal section so that final dressing of slope shall consist of cutting only and not filling.

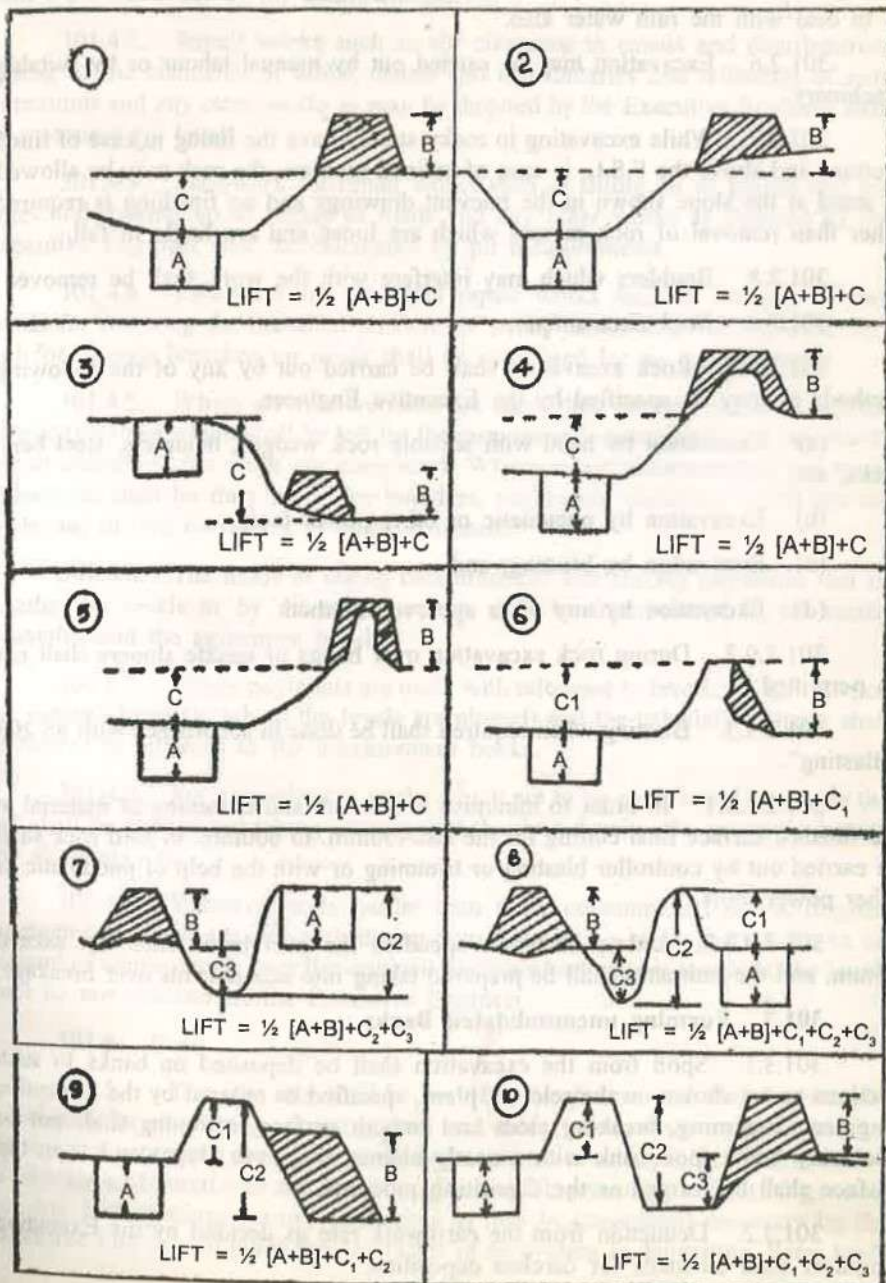
**301.2.2.** Suitable arrangements shall be provided to divert surface drainage clear of the excavation during the work. Sump pits may be excavated at suitable places and the water thus collected may be pumped out or let into a nearby valley.

**301.2.3.** In case ground water table is met during excavation adequate measures shall be taken for dewatering. The method adopted to dewater depends



All Dimensions in Metres

[Fig. 301.1. 1 to 10]



301.2.4. If there is a continuous spring of water a sub-drain with sumps at intervals may be provided. Excavation shall be done from down-stream side to up-stream side so as to facilitate easy drainage to the nearest natural drainage course.

301.2.5. In case of canals to be lined sub-soil water shall not be allowed to accumulate in the canal bed and the dewatering arrangements shall be so organised as to deal with the rain water also.

301.2.6. Excavation may be carried out by manual labour or by suitable machinery.

301.2.7. While excavating in rocky strata above the lining in case of lined sections and above the F.S.L. in case of unlined sections, the rock may be allowed to stand at the slope shown in the relevant drawings and no finishing is required other than removal of rock masses which are loose and are liable to fall.

301.2.8. Boulders which may interfere with the work shall be removed.

301.2.9. *Rock Excavation :*

301.2.9.1. Rock excavation shall be carried out by any of the following methods as may be specified by the Executive Engineer.

(a) Excavation by hand with suitable rock wedges, hammers, steel bars, picks, etc. ;

(b) Excavation by pneumatic or other power tools ;

(c) Excavation by blasting; and

(d) Excavation by any other approved method.

301.2.9.2. During rock excavation over hangs or unsafe slopers shall not be permitted.

301.2.9.3. Blasting when required shall be done in accordance with SS 203 "Blasting".

301.2.9.3.1. In order to minimise over break and loosening of material at the finished surface final cutting for the last 450mm. to 600mm. in hard rock shall be carried out by controller blasting or trimming or with the help of pneumatic or other power tools.

301.2.9.3.2. Unless otherwise specified the over break shall not exceed 75mm. and the estimates shall be prepared taking into account this over breakage.

**301.3. Forming unconsolidated Banks :**

301.3.1. Spoil from the excavation shall be deposited on banks to such sections as are shown on the relevant plans, specified or ordered by the Executive Engineer. Ramming, breaking clods and smooth surface sectioning shall not be necessary but a spoil bank with a neatly aligned toe, even slopes and even top surface shall be formed as the depositing proceeds.

301.3.2. Deduction from the earthwork rate as decided by the Executive Engineer shall be made for careless deposition.



**301.4. Measurement :—**All linear measurement shall be in metres correct to 0.01 of a metre and volumes worked out in cubic metre correct to 0.01 of a cubic metre.

**301.4.1.** All original works shall be measured by levels, except for foundations for buildings and trenches for pipe lines, etc., for which the quantities shall be worked out by pit measurements.

**301.4.2.** Repair works such as slit clearance in canals and distributaries, raising of the standards of tanks, canals and distributaries and widening of road formations and any other works as may be directed by the Executive Engineer shall be measured by levels.

**301.4.3.** Earthwork for repair works such as filling up of gullies and pot holes and making up of berms of roads and any other works as directed by the Executive Engineer shall be calculated by pit measurements.

**301.4.4.** Earthwork for emergent repair works such as forming of ring bunds for restoring the breached portions of tanks, canals and distributaries, etc., and for closing breaches on roads shall be calculated by pit measurements.

**301.4.5.** Where pit measurements are taken they shall be checked with the help of thandoos which shall be left for the purpose and maintained until the check-measurements of the work are completed. Wherever pit measurements are taken deductions shall be duly made for boulders, vegetation, thandoos which are not made use of and for losses of earth in transit.

**301.4.6.** The mode of taking measurements and making payments, that is, whether by levels or by pit measurements shall be incorporated in the tender schedules and the agreement bonds.

**301.4.7.** Where payments are made with reference to levels, the L.F. Books, the section sheets (in which the levels are plotted) and the calculation sheets shall be treated as adjuncts to the measurement books.

**301.4.8.** For embankment works which are to be paid, based on levels the rate shall be worked out taking into account the field density, the proctor's density and shrinkage, etc.

**301.4.9.** Wherever soils harder than those contemplated in the original sanctioned estimate are met with during actual execution in excavation works on account of which excess over the original sanctioned estimate is involved, the levels shall be test-checked by the Executive Engineer.

### **301.5. Rate :**

**301.5.1.** The unit rate shall be per 10 cubic metres and shall include the initial rate for excavating, dressing, bed and sides to exact sections of working plans, conveyance and depositing to the requirements of this specification, inclusive of 10 metres of initial lead and 2 metres of initial lift, providing and forming model sections, lock spittings, strings and stakes as may be considered necessary by the Executive Engineer to guide the contractor in excavating in depositing. Extra leads



and lifts shall be paid for separately when the material is conveyed by head loads. When conveyance charges are paid for transporting the material, no separate charge for extra leads and lifts shall be paid.

301.5.1.1. *Leads and Lifts* :

(i) "Lead" is the horizontal distance between the central line of the pit cross section and the central line of the bank which is formed with the excavated earthy. "Earth lead" by head-load will be the "lead" as above defined less an initial lead of ten metres. For every extra lead of ten metres or part thereof payment will be made at the contract schedule rate.

(ii) "Lift" is the vertical distance obtained by adding up, A, B and C where :

(A) = half the depth of pit actually excavated ;

(B) = half the maximum height of the bank formed with the excavated earth over existing ground or bank; and

(C) = the difference between the top level of pit actually excavated and the level above which the bank is formed.

Figures 301-1 1 to 10 illustrate the method to calculate the value of C in different circumstances (on page 177).

"Extra lift" by head load will be the sum of A, B and C as above defined less an initial lift of two metres. For every "extra lift" of one metre or part thereof payment will be made at the contract schedule rate.

301.5.2. In case of rock the rate shall be per cubic metre. The rate shall include the permissible over breakage of 75 mm. When measurement is not directly possible from the sections, it may be arrived at by measuring compactly formed stacks of the excavated rock. Deduction of 40 percent or higher percentage as may be directed by the Executive Engineer shall be made to allow for the voids.

301.5.3. Excavation in earthwork beyond the sections shown on the plans shall not be measured for payment. In the case of rock-excavation also the overbreakage of 75mm. referred to clause 301.5.2 shall not be measured for payment and therefore the contractor while quoting his rate for rock excavation has to take into account the permissible over breakage of 75mm.

301.5.4. *Dewatering* :—Unless specially provided for as a separate item in the contracts, the excavation rate shall include baling or pumping out all water which may accumulate in the excavation during the progress of the work either from seepage, springs or rain and diversion of surface flows if any by bunding or other means.